Montana's Strategic Prevention Enhancement Grant - Needs Assessment

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What is the Epi Workgroup's role in SPE?

- To provide a data-driven approach to the needs assessment looking at:
  - Substance abuse and mental illness;
  - Underage drinking and adult problem drinking;
  - Suicide and attempted suicide with emphasis on high risk especially military families, LGBTQ youth, or American Indians and Alaska Natives;
  - Prescription drug misuse and abuse.

Goals of this presentation

- Review methodology
- Review indicator data and scoring
- Review findings
- Discussion and Questions

Methodology

- Developed list of data sources
- Developed database of indicators
- Scored indicators to determine initial ranking
  - Change in Montana 2006/2007 rate to Montana 2009/2010 rate
  - Montana Trend
  - Annual # persons in Montana
- Initial Ranking based on combined scores
- Determine age cohorts
- Integrate other data components
- Create data snap shots

Results of Scoring

- Cut off score = 3.0
- 45 indicators above cut off
- 65 indicators below cut off

Spread of Scored Indicators

SPE Area of Concern	#	as % 45	HIGH SCHOOL TEENAGERS	YOUNG ADULTS UNIVERSITY STUDENTS	ADULTS
Suicide and attempted suicide	8	17%	3	0	5
Underage drinking and adult problem drinking	25	55%	7	5	13
Substance abuse and mental illness	12	28%	6	0	6
Prescription drug misuse and abuse	0	0%	0	0	0
Total	45	100%	16	5	24

Review Data Snap-Shots

- HIGH SCHOOL/TEENAGERS
- YOUNG ADULTS/UNIVERSITY STUDENTS
- ADULTS
- SUICIDE AND ATTEMPTED SUICIDE

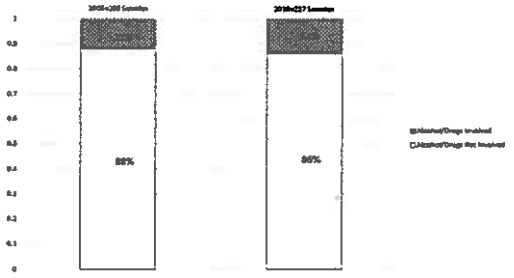
Additional Data

- Indicator scoring gives 'macro' ranking of areas of concern.
- Need to drill down and cross reference by:

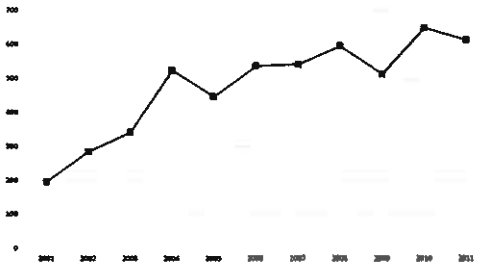
→Age groups and

→Abuse problems

Montana Annual Number of Suicides: Percent of Suicides (All Ages) Where Alcohol or Drugs Were Involved for 2005 and 2010



Annual Number of Toxicology Cases Where Pain Killers (Opioids) Were Present but Not Cause of Death: 2001-2011, Montana State Crime Lab



Ranked by highest to lowest scores by area of concern and age groups.

Area of Concern	High school/teenagers	Young adults/University Student	Adults
Suicide and attempted suicide	1	3	1
Underage drinking and adult problem drinking	2	1	3
Substance abuse and mental illness	3	2	2
Prescription drug misuse and abuse	4	4	4

Patterns across Age Group Profiles

#1 CONCERN:
→High School/teenagers and Adults: Suicide & attempted suicide
→Young Adults (18 to 25 years of age): Underage drinking & adult problem drinking

#2 CONCERN:
→High School/teenagers: Underage drinking & problem drinking
→Young Adults and Adults: Substance abuse & mental illness

#3 CONCERN: Different for each profile
→High School/Teenagers: Substance abuse & mental illness
→Young Adults: Suicide & attempted suicide
→Adults: Adult problem drinking

#4 CONCERN: Same Across all three profiles
→Prescription Drug Use and Misuse

Favorable trends for some indicators ....BUT .....

- **Montana had 2,437 Driver/Alcohol Crashes in 2010, most of which involved injuries**
- **Prescription drugs=18% of the State Crime Lab's +3300 toxicology cases in 2008**
- **Some standout numbers:**

	Adults*	Students*
Attempted Suicide	90,619	3,076
Binge Drinking	128,377	10,985
Drive after drinking	67,964	4,941

Note*: Different Surveys-->Adults (BRFSS) and Students (PNA or YRBS)

Questions & Discussion

Thank you

Background and Methodology

In support of the Strategic Planning Enhancement Grant (SPE) Consortium, the Montana Epidemiological Workgroup undertook to assist in a statewide needs assessment by compiling available data on SPE areas of concern.

SPE areas of concern:

- Substance abuse and mental illness;
- Underage drinking and adult problem drinking;
- Suicide and attempted suicide with emphasis on high risk especially military families, LGBTQ youth, or American Indians and Alaska Natives;
- Prescription drug misuse and abuse.

Initial Steps

A comprehensive list of all national and state agencies that collect Montana data pertinent to the SPE areas of concern was developed. It was agreed, that data sources must fit as many of the following criteria as possible to be included in the database:

- *Centralized and consistent source:* The measure must be consistent, i.e. the method or means of collecting and organizing data should be relatively unchanged over time.
- *State level and regional breakdowns:* The measure must be available from a centralized, state or regional data source.
- *Validity:* The measure must meet basic criteria for validity, i.e. the data should accurately measure the specific construct.
- *Periodic collection:* The measure should be available for the past three to five years, preferably on an annual or at least biennial basis.
- *Sensitivity:* For monitoring, the measure must be sufficiently sensitive to detect change over time that might be associated with changes in alcohol, tobacco or illicit drug use/abuse.
- *Culturally competent:* The measure must be available in disaggregated form to reflect different demographic and geographic breakdowns.

Data sources include:

1) Department of Public Health & Human Services (DPHHS)
    a) Addictive & Mental Disorders Division (AMDD)
    b) Montana Vital Statistics Analysis Unit (MT VSAU)
    c) Behavioral Risk Factor Surveillance Survey (BRFSS)
    d) Prevention Needs Assessment survey (PNA)
    e) Hospital Discharge Data System (HDDS)
2) Office of Public Instruction
    a) Youth Risk Behavior Survey (YRBS)
3) Montana Supreme Court (MTSC)
    a) District Court/Youth Court (MTYC)
4) Montana Board of Crime Control (MTBCC)
5) Montana Department of Transportation (MDT)
6) Substance Abuse & Mental Health Services Administration
    a) National Survey on Drug Use & Health (NSDUH)
    b) Treatment Episode Data Set (TEDS)
    c) National Survey of Substance Abuse Treatment Services (N-SSATS)
7) American College Health Association

a) National College Health Assessment (ACHA-NCHA)
8) National Survey of Family Growth (NSFG)

Other data sources not used for the database but used in the additional data sections:
a) Prescription Drug Abuse Awareness Program
b) State Crime Lab
c) Drug Abuse Warning Network

Databases associated with chosen data sources were evaluated for their immediate relevance to Montana's SPE and indicators were then chosen and a SPE database developed. Indicators were collected for 2006/2007 and 2009/2010 to show trending in the data.

Data base elements collected from DPHHS Addictive and Mental Disorders Division reflect data from the treatment facilities listed below. These indicators were not scored as they summarized such things as demographics and length of stay and were used to fill out the picture of what is going on in Montana.

- Montana Chemical Dependency Center;
- Montana State Hospital; and
- Montana Mental Health Nursing Center.

Indicators collected and reported by the National Survey of Substance Abuse Treatment Services are shown as coming from "all Montana facilities". This means: "The National Survey of Substance Abuse Treatment Services (N-SSATS) is designed to collect information from all facilities in the United States, both public and private, that provide substance abuse treatment. In Montana, 53 substance abuse treatment facilities were included in the 2010 N-SSATS."

Ranking of Indicators

The Montana Epidemiological Workgroup ranked the final list of indicators based upon the following equally weighted criteria:

- Change in Montana 2006/2007 rate to Montana 2009/2010 rate
- Montana Trend
- Annual # persons in Montana

The scoring scheme used for each indicator was:

5 points = high (i.e. this is a high priority indicator)
3 points = medium (i.e. this a medium level priority)
1 point = low (i.e. this is a low level priority)

The data cells where data was not available were not scored. After scoring each column, individuals averaged the scores for each indicator. Scored spreadsheets were collected and a master sheet was compiled averaging all scored sheets. This enabled the group to determine an initial prioritized list of SPE areas of concern. It is important to note that some areas of concern had many more indicators available than other areas; such as alcohol versus prescription drugs.

Data Snap Shots

Three data snap shots were developed to report on the ranking of problems as scored by the workgroup and then integrated with other data components such as mental health data that are not appropriate for scoring but give a more significant picture of what is going on around the state. Three broad age

groupings were determined to be the most appropriate way to present the findings. These age groupings, as much as possible, corresponded with the age groups for which data is collected. Unfortunately there was some overlap in ages in all data snap shots because of the differing formats of data collection. Additional data information that was not in the SPE database was included where available and where appropriate.

- High school/teenagers: Includes 8th through 12th grade, and under 18 years of age not necessarily high school.
- Young adults/University Student: Includes university students and those under 25 years of age not necessarily at university.
- Adults: Indicators include the following age breakdowns: 17 years old and up, 21 – 25 years old and all ages

An additional data snap shot was developed on the SPE area of concern covering suicide and attempted suicide:

- Suicide and attempted suicide (high risk especially military families, LGBTQ youth, or American Indians and Alaska Natives)

Data Challenges

Substance abuse and mental illness

- No data links or cross-tabs with alcohol and drug abuse;
- Limited number of measures available.

Underage drinking and adult problem drinking

- Very few data linkages to mental health and suicides;
- Lack of age breakdowns on age and drinking/driving.

Suicide and attempted suicide with emphasis on high risk especially military families, LGBTQ youth, or American Indians and Alaska Natives

- Very little data making connection between suicides and these groups;
- Only national data available on LGBTQ youth;
- Due to confidentiality issues, Public Health and Safety Division guidelines require that no data is publically released if the frequencies of cell sizes is less than five or calculation of rates are based on fewer than 20 events.

Prescription drug misuse and abuse

- No connections with alcohol and other types of drug abuse
- State Crime Lab data does not have age breakdowns

Data Caveats and Other Influences:

- Some data is not available on websites and often researchers have to go to the data collection agency to obtain special tabulations.
- Some law enforcement data such as DUI, citations and convictions depend on existing and changing laws, state and local resources available for enforcement; likewise, local community awareness of and commitment to dealing with the problems associated with alcohol and drug abuse which influences enforcement.

Data on prescription drug misuse and abuse is less available using the data source requirements listed above. However as much as possible information gleaned from other sources has been included in the data snapshots to provide as total a picture as possible.

HIGH SCHOOL/TEENAGERS

Includes 8th through 12th grade, and under 18 years of age not necessarily in high school

Suicide and attempted suicide: AVERAGE SCORE = 3.60

3.74 Attempted suicide one or more times during past 12 months
3.59 Children considered attempting suicide in past 12 months
3.47 Completed Suicides, ages 10-17

Additional Data

- From 2001 - 2010, fewer than five children under 17 committed suicide using Fentanyl or other synthetic narcotics representing 66.6% of all children under 17 committing suicide using some type of drug.
- Sixty-eight percent (68%) of suicides among children under the age of 17 did not use alcohol or drugs to commit suicide.
- Average suicide rates over 2006-2010 are broken down by race among children ages 10 – 18. These show rates of 8.7 suicides per 100,000 population for all races; 6 for whites, 33.4 for American Indian/Alaskan Natives and 7.1 for other or unknown race.

(Montana Vital Statistics Analysis Unit)

Underage drinking and adult problem drinking: AVERAGE SCORE = 3.58

4.01 Children having one or more drinks of alcohol in past 30 days
4.00 Kids who had more than a sip or two of alcohol before age 12
3.67 Children who think there's moderate to great risk of harming themselves if they have one or two alcoholic drinks nearly every day*
3.67 Children binge drinking one or more times in past 30 days
3.34 Children who think it's hard or very hard for kids to get alcoholic beverages*
3.26 Children driving when drinking alcohol one or more times in past 30 days
3.13 Children seeing drinking alcohol regularly as wrong or very wrong

**Indicators where the trend has risen, representing an improvement.*

Substance abuse and mental illness: AVERAGE SCORE = 3.25

3.81 Clients under age 18 in all Montana facilities*
3.60 Drug court youth testing positive for drug use**
3.06 Children seeing using illegal drugs like cocaine, LSD or marijuana as wrong or very wrong
3.01 Children using marijuana one or more times during lifetime
3.01 Children seeing smoking marijuana as wrong or very wrong
3.01 Children thinking there's moderate to great risk of harming themselves if they smoke marijuana regularly

** As collected and reported by the National Survey of Substance Abuse Treatment Services. "The National Survey of Substance Abuse Treatment Services (N-SSATS) is designed to collect information from all facilities in the United States, both public and private, that provide substance abuse treatment. In Montana, 53 substance abuse treatment facilities were included in the 2010 N-SSATS."*

***This measure is affected by outside biases; different Youth Courts districts have different practices., individual judges and probation officers decide what drug test to be used and how often. Most often, the terms of the probation include some level of drug testing. Unless a case goes formal (e.g., drug court) judges have little to do with determining the scope of drug testing. Funding is not an issue.*

Additional Data:

- Thirty-three percent of all Medicaid youth 5 years old and younger was provided with Mental Health Services in SFY10, representing 4,035 children or 6.5% of ALL Montana kids 5 and under. (Children's Mental Health Bureau)

Prescription drug misuse and abuse

No prescription drug misuse and abuse indicators scored above the 2.99 cut off. The two highest scored indicators for the HIGH SCHOOL/TEENAGER cohort were:

2.93 Clients under age 18 in all substance abuse treatment facilities
2.73 Youth court referrals: Dangerous Drugs

Additional Data:

- Youth aged 18 and under accounted for 22.4 % of all drug related arrests. (Montana Incident-Based Reporting System)
- In 2010, 27 children between the ages of 12 and 17 were hospitalized for drug and/or alcohol poisoning. (Hospital Discharge Data System)

YOUNG ADULTS/UNIVERSITY STUDENTS

Includes university students and those under 25 years of age not necessarily in university

Underage drinking and adult problem drinking AVERAGE SCORE = 3.38

- 3.60 Students having 5 or more alcoholic drinks last time they drank
- 3.39 Drove after binge drinking
- 3.40 Misdemeanor/felony cases filed: Minor in Possession
- 3.33 Liquor law violations: Underage drinking related
- 3.20 Binge drinking, past 2 weeks

Substance abuse and mental illness

No substance abuse and mental illness indicators scored above the 2.99 cut off. The two highest scored indicators for the ADULT/UNIVERSITY STUDENTS group were:

- 2.13 Used marijuana one or more days during past 30 days
- 2.10 Currently taking medication for depression

Suicide and attempted suicide

No suicide and attempted suicide indicators scored above the 2.99 cut off. The two highest scored indicators for the YOUNG ADULT/UNIVERSITY STUDENTS group were:

- 2.27 Male students attempting suicide, past year (NCHA)
- 2.20 Female students seriously considering suicide, past year (NCHA)

Additional Data:

The National College Health Assessment (NCHA), reports on only University of Montana students. This report also shows that:

- 10% of male students and 11% of female students seriously considered suicide in the past year.
- 1% of both male and female students attempted suicide in the past year.

National College Health Assessment

- Average suicide rates over 2006-2010 are broken down by race among young adults ages 19 – 25. These show rates of 24.7 suicides per 100,000 population for all races; 21.5 for whites, 54.3 for American Indian/Alaskan Natives and 39.9 for other or unknown race. (Montana Vital Statistics Analysis Unit)

Data provided by the Montana Vital Statistics Analysis Unit on method of suicide reported for adults over 17 years. Thus some of these incidents pertain to the young adult cohort but are not broken down to report specifics. However some of the numbers reported in the following would include this age cohort.

- From 2001 – 2010, 236 adults over the age of 17 committed suicide using some type of drug and/or other biological substances representing 12.6% of all adults over 17 who committed suicide.
- Eighty-seven percent (87.2%) of suicides among adults over the age of 17 did not use alcohol or drugs to commit suicide.

Prescription drug misuse and abuse

No prescription drug misuse and abuse indicators scored above the 2.99 cut off. The two highest scored indicators for the YOUNG ADULT/UNIVERSITY STUDENTS group were:

1.67 Received alcohol/drug use prevention information from the University

(There were no other indicators in the database for this measure and this age group.)

Additional Data:

- In 2010, 402 people over the age of 18 were hospitalized for drug and/or alcohol poisoning (Hospital Discharge Data System)
- From 2001 – 2010, 70 adults over the age of 17 committed suicide using one of the following drugs: Morphine, Oxycodone, Hydrocodone, Methadone, Other Synthetic Narcotics, Fentanyl, Pethidine, Other and Unspecified Narcotics. This represents 27.8% of those adults over 17 who committed suicide using some type of drug. (Montana Vital Statistics Analysis Unit)

ADULTS

Indicators include the following age breakdowns: all ages, over 26, over 18 and over 17 years old.

Suicide and attempted suicide **AVERAGE SCORE = 3.97**

4.37 Suicides, all ages (number)
4.37 Suicides, ages 18+
4.13 Suicides, all ages (rate per 100,000)
3.87 Attempted suicide one or more times in past 12 months (subset of line 93)
3.13 Hospitalizations for suicide attempts, ages 18+

Additional Data:

- From 2001 – 2010, 236 adults over the age of 17 committed suicide using some type of drug and/or other biological substances representing 12.6% of all adults over 17 who committed suicide.
- From 2003 – 2010, 27% of 1,585 suicide deaths involved alcohol or drugs.
- From 2001 – 2010, 87.2% of suicides among adults over the age of 17 did not use alcohol or drugs to commit suicide.
- Annual suicide rates from 2005 through 2010 show little to no change in number of suicide involving drugs and alcohol.
- Suicide has ranked as the 7th or 8th leading cause of death for Montanans for more than two decades.
- Average suicide rates over 2006-2010 are broken down by race among all Montanans 10 years old and older. These show rates of 24.3 suicides per 100,000 population for all races; 23.5 for whites, 31.8 for American Indian/Alaskan Natives and 40.6 for other or unknown race.
- Average suicide rates over 2006-2010 are broken down by race among adults over age 26 years. These show rates of 27 suicides per 100,000 population for all races; 26.8 for whites, 25.3 for American Indian/Alaskan Natives and 54.4 for other or unknown race.

(Montana Office of Vital Statistics)

Substance abuse and mental illness **AVERAGE SCORE = 3.54**

3.79 Illicit drug use, past month
3.74 Adults treated for alcohol abuse w/secondary drug
3.59 Needing but not receiving treatment for illicit drug use
3.53 Total facilities with substance abuse and mental health treatment services*
3.53 All clients in treatment in Montana facilities**
3.07 Any mental illness, past year

** As collected and reported by the National Survey of Substance Abuse Treatment Services. The number of facilities with substance abuse and mental health treatment services in Montana rose from 11 in 2007 to 23 in 2010.*
*** As collected and reported by the National Survey of Substance Abuse Treatment Services. The rise in the number of treatment centers is reflected in this indicator going from 474 in 2007 to 1693 in 2010.*

Additional Data

Montana Facility (2010 data)	Average Daily Population (trend since 2007)	Average Age	% of patients w/co-occurring disorders	Median length of stay (days)
MT Chemical Dependency Center	52 (up)	34	92%	34
MT State Hospital	189 (up)	44	55%	40
MT Mental Health Nursing Center	82 (up)	62	40%	3.2 (years)

DPHHS Addictive and Mental Disorders Division

Additional Data:

- 12.46% of Montana's adult population has serious psychological distress and approximately 9% of Montana adolescents and adults have major depressive episodes.
- Individuals with serious mental illness (SMI) constitute 6-8% of the U.S. population, but account for several times that proportion of the 32,000 suicides that occur each year in the country

(Montana Strategic Suicide Prevention Plan - 2011)

Underage drinking and adult problem drinking AVERAGE SCORE = 3.50

4.07 Needing but not receiving treatment for alcohol use
4.00 Drive motor vehicle after binge drinking
3.86 Binge drinking, adults (past 30 days)
3.73 Alcohol/Drug related crashes
3.73 DUI offenses
3.67 Adult alcohol dependence or abuse, past year
3.46 Adults driving after drinking too much at least once in past 30 day
3.40 DUI convictions
3.21 Adult alcohol dependence, past year
3.20 Convictions per 1,000 population
3.07 Misdemeanor/felony cases filed: DUI--Alcohol
3.06 Adults treated for alcohol abuse only
2.99 Alcohol-related fatalities (BAC=0.01+)

Additional Data:

- Binge drinking rates for males of all ages is 22.6% compared to 11.4% for all females.

Additional Data on young adults (2010):

- The rate of fatal alcohol crashes per 10,000 licensed drivers of all ages was 1.3, for 20-24 year old it was 3.1. Young adults (20-24) are 3 times more likely to be in fatal alcohol crashes compared to all ages. (Montana Department of Transportation)
- Drivers 21 – 24 years of age accounted for 15% of all drivers in fatal alcohol crashes BUT represent only 6% of all licensed drivers. (Montana Department of Transportation)
- Binge drinking rates for 18 – 24 year olds was 22.9% compared to 17% for all ages. (Behavioral Risk Factor Surveillance Survey)
- Binge drinking rates for 25 – 34 year olds was 25.9% compared to 17% for all ages. (Behavioral Risk Factor Surveillance Survey)

Prescription drug misuse and abuse

No prescription drug misuse and abuse indicators scored above the 2.99 cut off. The two highest scored indicators for the ADULT cohort were:

2.94 Non-medical pain reliever use, past year

2.93 Misdemeanor/felony cases filed: DUI--Any drug

However, in the 2.99 to 2.46 scoring range there were 31 indicators and of these 31, 14 of them were adult prescription drug misuse and abuse indicators (45%).

Additional Data:

- The number of drugs other than alcohol found in DUI cases in Montana has risen every year between 2007 and 2009.
- Cannabis was the leading drug found in the 2009 DUI cases (231).
- Of the 15 top drugs found in 2009 DUI cases, 9 were depressants, 4 were narcotic analgesics and 2 were stimulants.
- Thirty-two percent of fatal vehicle crashes involved drugs, with 1/3rd involving more than one drug category (depressant, narcotic and stimulants).

  (Department of Justice, Forensic Science Division)
- In 2010, 402 people over the age of 18 were hospitalized for drug and/or alcohol poisoning (Hospital Discharge Data System)
- From 2001 – 2010, 70 adults over the age of 17 committed suicide using one of the following drugs: Morphine, Oxycodone, Hydrocodone, Methadone, Other Synthetic Narcotics, Fentanyl, Pethidine, Other and Unspecified Narcotics. This represents 27.8% of those adults over 17 who committed suicide. (Montana Office of Vital Statistics)

Additional Data on young adults (2010):

- 18 – 24 year olds accounted for 37.7% of all drug related arrests. (Montana Incident-Based Reporting System)

SUICIDE AND ATTEMPTED SUICIDE

The Strategic Planning Enhancement Grant (SPE) identified suicide and attempted suicide as a one of four areas of concern; with emphasis placed on high risk groups, especially military families, LGBTQ youth, or American Indians and Alaska Natives.

LGBTQ youth

No data sources used in the SPE Needs Assessment Database had Montana-specific statistics on suicide or attempted suicide among lesbian, gay, bisexual, transgender/transsexual/two-spirited, queer/questioning (LGBTQ) youth.

Montana Data:

- The National College of Health Assessment provided data on sexual orientation amongst University of Montana students, an age cohort not considered "youth".
  - 4% of male UM students reported having male sexual partners
  - 2% of female UM students reported having female sexual partners
- The 2010 National Survey of Family Growth provided Montana data on ages 18 – 44 which does not include "youth".
  - 2% of Montana males between the ages of 18 – 44 self-identified as homosexual
  - 1% of Montana females between the ages of 18 – 44 self-identified as homosexual
- The 2000 Census provided Montana-specific data on the sexual orientation within the general population:
  - For all ages, there are approximately 1,200 same-sex couples in Montana, which ranks Montana 48th in the nation. This number is considered to be significantly lower than the actual number, especially since this number does not include youth. (U.S. Census Bureau, Census 2000)
- Montana Strategic Suicide Prevention Plan—2011
  - Alcohol and drug impairment, a sense of hopelessness, underlying mental illness, and a societal stigma against depression, all contribute to the high rate of youth suicide in Montana.

National Data:

National data can be found in the Montana Strategic Suicide Prevention Plan—2011 and other national studies.

- Research concludes that high rates of "major depression, generalized anxiety disorder and substance use or dependence" persist in lesbian and gay youth. (American Psychologist)

- Nationally 42% of gay and lesbian youth who were studied had thoughts of suicide at some time. 25% had thoughts of suicide in the past year, and 48% said thoughts of suicide were related to their sexual orientation. (Centre for Suicide Prevention 2003)
- Youth with same-sex orientation are 23 times more likely than their opposite-sex peers to attempt suicide.
- Approximately 15% of youth who reported suicide attempts also reported same-sex attraction or relationships.
- These youth also presented as higher risk for alcohol abuse and depression

(Russel, S.T. & Joyner, K., 2001, Centre for Suicide Prevention, 2003)

- 75.4% of LGBT high school students reported hearing remarks such as "faggot" or "dyke" frequently or often at school.
- 89.2% of LGBT high school students reported hearing "that's so gay" or "you're so gay" (often used to indicate that someone or something is stupid or worthless) frequently or often at school.
- 18.6% of LGBT high school students reported hearing homophobic remarks from their teachers or other school staff.
- 74.2% of LGBT high school students in the survey reported feeling unsafe in school because of personal characteristics, such as their sexual orientation, gender or religion, 64.3% reported feeling unsafe at school because of their sexual orientation specifically, and 40.7% felt unsafe because of how they expressed their gender.

- 64.1% of LGBT high school students reported that they had been verbally harassed at least some of the time in school in the past year because of their sexual orientation and 45.5% because of their gender expression.
- 37.8% of LGBT high school students had experienced physical harassment at school on the basis of sexual orientation and 26.1% on the basis of their gender expression.
- 17.6% of LGBT high school students had been physically assaulted because of their sexual orientation and 11.8% because of their gender expression.

(Gay, Lesbian and Straight Education Network, 2005 National School Climate Survey)

American Indians and Alaska Natives (ALL AGES)

- Between 2000 and 2009, the highest rate of suicide in Montana was among American Indians (24.11 per 100,000) followed by Caucasians (19.95 per 100,000).
- Among American Indians/Alaska Natives ages 15- to 34-years, suicide is the second leading cause of death.
- Suicide rates among American Indian/Alaskan Native adolescents and young adults ages 15 to 34 (21.4 per 100,000) are 1.9 times higher than the national average for that age group (11.5 per 100,000).
- Between 2000 and 2009, there were 138 suicides by American Indians, compared to 1,713 by Caucasians. However, Caucasians constitute 90.5% of the population while American Indians only constitute approximately 6.4%.

(Montana Strategic Suicide Prevention Plan—2011)

- From 2006 – 2010, the average suicide rates per 100,000 population were higher for American Indians/Alaskan Natives races than all other age groups. It was highest among the 19 – 25 age group (54.3), then among the 10 – 18 year olds (33.4), followed by 10 and older (31.8), the lowest rate was among the 26 and older age group (25.3).

Age	All races	White	American Indian/Alaska Native	Other or Unknown
10 – 18	8.7	6.0	33.4	7.1
19 – 25	24.7	21.5	54.3	39.9
10 and older	24.3	23.5	31.8	40.6
26 and older	27.0	26.8	25.3	54.4

Average suicide rate per 100,000 by age; 2006 - 2010 (Montana Vital Statistics Analysis Unit)

Youth Risk Behavior Survey (YRBS) Grades 8, 10 and 12

YRBS Findings	Hispanic/Latino	Native American	White
% of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	31.1%	30.9%	24.2%
% of students who seriously considered attempting suicide during the past 12 months	23.3%	21.2%	14.2%
% of students who made a plan about how they would attempt suicide during the past 12 months	18.7%	15.1%	11.5%
% of students who actually attempted suicide one or more times during the past 12 months	9.8%	11.9%	5.6%
% of students who made a suicide attempt during the past 12 months that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse	5.2%	5.2%	1.8%

Source: Youth Risk Behavior Survey (2011)

Military families

- The VA estimated that in 2005, the suicide rate per 100,000 veterans among men ages 18-29 was 44.99, but jumped to 56.77 in 2007.
- In Montana, between 2003 and 2009, there were 347 suicides by Montana veterans of all ages, giving us a rate of approximately 46 per 100,000.
- Montana has more than 100,000 veterans or nearly one person in every 10.

(Montana Mental Health Oversight Advisory Council)

- Veterans diagnosed with depression in the 18 to 44 year old group were at most risk for suicide at a rate of 95.0 suicides per 100,000 compared to 45 -65 year olds whose rate was 77.9 per 100,000.
- Veterans who also had a diagnosis of post-traumatic stress disorder (PTSD) were less likely to commit suicide (68.2 per 100,000) compared to depressed veterans without this disorder (90.7 per 100,000).

(Montana Strategic Suicide Prevention Plan - 2011)

- Nationally, Army Reserve National Guard veterans aged 26 – 30 years old had the highest number of suicides among all age groups.
- Twenty-five 26-30 year olds committed suicide in 2011 compared to the next highest number of 12 among the 31 to 35 year olds.
- There were more suicides among Army Reserve National Guard personnel who had never been deployed compared to those in theatre or returning veterans.

(Army Reserve National Guard)

Observations and Conclusions

Strategic Planning Enhancement Grant (SPE) areas of concern:

Below is the table showing differences in priority ranking of SPE areas of concern over the three big age groupings after being scored by the Epidemiological Workgroup.

Area of Concern	High school/teenagers	Young adults/University Student	Adults
Suicide and attempted suicide	1	3**	1
Underage drinking and adult problem drinking	2	1	3
Substance abuse and mental illness	3	2	2
Prescription drug misuse and abuse*	4	4	4

Epidemiological Workgroup: Ranked by highest to lowest scores by area of concern and age groups.

Caveats to rankings:

*Prescription drug misuse and abuse came out with a low ranking but the Epidemiological Workgroup expressed concern that this could be misleading because of recent increasing numbers of prescription drug abuse and misuse.
**The suicide and attempted suicide rank of 3rd in the young adult/university student age group may reflect a lack of indicators specific to these ages.

Suicide and attempted suicide

All Montanans

- Suicide and attempted suicide was the highest scored SPE area of concern among both high school/teenagers and adults.
- Where trend data was available for suicide measures the rates/number had increased.
- From 2006 – 2010, the average suicide rates per 100,000 population for all races was highest among the 26 and older age group (27), then among the 19 – 25 age group (24.7), followed by 10 and older (24.3), the lowest rate was among the 10 – 18 year olds (8.7).

Military families,

- An average of 43 military personnel in Montana committed suicide each year between 2003 and 2009.
- Veterans diagnosed with PTSD appear less at risk for suicide than veterans without that diagnosis.

LGBTQ youth,

- LGBTQ youth are subjected to bullying by their cohorts at alarmingly high rates.
- LGBTQ youth had high rates of major depression, generalized anxiety disorder and substance use or dependence.
- Attempted suicide rates among LGBTQ youth are estimated to be 23% higher than their peers with opposite-sex orientation.

American Indians and Alaska Natives

- In all measures suicide rates among American Indians and Alaska Natives were higher than any other group.
- From 2006 – 2010, the average suicide rates per 100,000 population were higher for American Indians/Alaskan Natives races over all age groups compared to other races.
- The average suicide rate per 100,000 population among American Indian/Alaskan Native young adults aged 19 – 25 was over twice that of their white cohort.

Underage drinking and adult problem drinking

- Underage drinking and adult problem drinking was the highest scored SPE area of concern among young adults.
- Underage drinking and adult problem drinking was the next highest scored SPE area of concern among high school/teenagers.
- Alcohol abuse indicators trended flat or decreased.
- There was an increase in the rate of children in grades 8 – 12 viewing drinking regularly as a negative or thinking that alcohol was hard to obtain.
- Alcohol/Drug related vehicle crashes as a percent of all crashes decreased.

Substance abuse and mental illness

- Measures to link substance abuse and mental illness were mostly unavailable making it necessary to find surrogate indicators.
- Most of the indicators for mental illness were for adults and few for the high school/teenager or young adults.
- There was an increase in the rate of children in grades 8 – 12 viewing marijuana as harmful or thinking illegal drugs (cocaine, LSD or amphetamines) were hard to obtain.

Prescription drug misuse and abuse

- Many measures on prescription drugs have trended upwards compared to alcohol indicators that have remained flat or gone down.
- The number of people reported in prescription drug consumption or consequence indicators is considerably smaller than the number of people reported in alcohol consumption or consequence indicators making this a difference in the scale of the problems.